

forth a *prima facie* case of obviousness. Furthermore, applicants' successful commercialization of the claimed invention to satisfy a long felt need in the marketplace demonstrates that the claimed invention is not obvious. For these reasons, applicants respectfully request that the Examiner withdraw the rejections of the pending claims under 35 U.S.C. § 103(a).

CLAIMED SUBJECT MATTER

Applicants' claims are directed wireless transmission of a transmit mode signal for causing a half-duplex communications device (as defined in the specification) to enter a half-duplex transmission mode. Claims 1, 18, 26, and 34 are the independent claims.

Claim 1 sets forth a wireless headset. The wireless headset includes a transceiver adapted to transmit the signal. Claim 18 sets forth an apparatus including a transceiver adapted to receive signals from a wireless headset and an interface for connection to a half-duplex communications device. Claim 18 further sets forth a processor that receives a transmit mode signal and provides a transmit mode signal to the half-duplex communications device. Claim 24 sets forth a system including a wireless headset adapted to transmit the transmit mode signal and a half-duplex communications device. Claim 34 sets forth a system including a transmit switch assembly that is adapted to wirelessly transmit the transmit mode signal.

APPLIED ART

The applied art does not show or suggest wireless transmission of a transmit mode signal for causing a half-duplex communications device to enter a half-duplex transmission mode. Lenz is directed to a shoulder activated headset. Lenz expressly discloses a cord connecting the headset to a two-way radio. Lenz, col. 2, ll. 22-23. Lenz does not show or suggest the wireless transmission of a transmit mode signal. Hahn is directed to a wireless headset system. Hahn describes a transceiver for wirelessly transmitting and receiving signals representative of audio signals. Hahn, col. 1, l. 67 – col. 2, l. 4. Hahn includes no suggestion of any control or mode signals that are transmitted by the headset. Hahn does not show or suggest the wireless transmission of a transmit mode signal.

NO MOTIVATION TO COMBINE REFERENCES

Independent claims 1, 26, and 34 stand rejected as being unpatentable over Lenz in view of Hahn. Independent claim 18 stands rejected as being unpatentable over Hahn in view of Lenz. When combining references to establish obviousness "[t]he references must be considered as a

whole and must suggest the desirability and thus the obviousness of making the combination.” M.P.E.P. § 2141 (8th Ed. Rev. 2, 2004) (citing *Hodosh v. Block Drug Co.* 786 F.2d 1136, 1143 n. 5, 229 U.S.P.Q. 182, 187 n. 5 (Fed. Cir. 1986)). “The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention.” *Id.* “The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.” M.P.E.P. § 2142. As demonstrated below, the Examiner has not met this burden. The references do not suggest the desirability and thus the obviousness of making the combination suggested by the Examiner.

In the rejection of claim 18, the Examiner identifies no motivation or suggestion to modify Hahn with the teaching of Lenz. Accordingly, the Examiner has not established a *prima facie* case of obviousness of claim 18. With respect to claims 1, 26, and 34, the Examiner asserts that it would have been obvious to use a wireless headset (of Hahn) instead of a wired headset (of Lenz) because the wired headset might entangle users. “Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.” M.P.E.P. § 2143.01. A *prima facie* case of obviousness is not established against claim 18 as no teaching, suggestion or motivation to modify the primary reference to Hahn is identified.

With regard to the rejections of claims 1, 26, and 34, the motivation provided by the Examiner is insufficient for two reasons. First, the applied art does not address the “entanglement” issue identified by the Examiner. Hahn is silent regarding entanglement. Lenz also includes no teaching that the cord disclosed might entangle a user. Further, the prior art does not suggest the combination assembled by the Examiner. To the contrary, the Examiner has used applicants’ invention as a template to assemble the features of the claimed invention and, then in hindsight, has created a motivation to combine the selected teachings. Second, the motivation provided by the Examiner does not address the transmit mode signal of applicants’ claims. There is no teaching in Lenz to transmit any signal from the described headset wirelessly. There is also no teaching in Hahn to transmit any control signals from a headset wirelessly. Accordingly, there is no suggestion that the wireless system of Hahn, which is silent regarding any control signals, is compatible with the Lenz device, which includes a push-to-talk

button. For at least these reasons, the Examiner has not set forth a sufficient motivation or suggestion to combine the references in a manner that arrives at the claimed invention.

SECONDARY CONSIDERATIONS DEMONSTRATE NONOBVIOUSNESS

Applicants respectfully assert that the failure of others to satisfy a long felt need and applicants' successful business based on the claimed invention further demonstrates the non-obviousness of the claimed invention. Applicants submit herewith declarations by Anthony J. Sutura (Sutura Decl.) and D. Scott Miller (Miller Decl.) under 37 C.F.R. 1.132 demonstrating commercial success and long felt need. The Office must consider objective evidence of nonobviousness. *In re Huang*, 100 F.3d 135, 40 U.S.P.Q.2d 1685, 1689 (Fed. Cir. 1996); M.P.E.P. § 2141. The declarations are timely filed. A declaration filed after final rejection is timely if submitted with a first reply for the purpose of overcoming a new ground of rejection made in the final rejection. The declarations are submitted for the purpose of overcoming the new rejections under 35 U.S.C. § 103(a) based on the combination of Lenz and Hahn. Applicants note that these are the first rejections of the independent claims asserting obviousness over a combination of multiple references. Applicants respectfully request that the rejections under 35 U.S.C. § 103(a) be withdrawn in view of the objective evidence submitted herewith.

COMMERCIAL SUCCESS

As demonstrated in the Sutura Declaration, applicants have successfully established Radeum, Inc. ("Radeum") based on their business plan to bring to market the claimed invention. In 2003, applicants identified a need for wireless two way radio headsets. At that time, the radio industry included no wireless headsets for two way radios, which are radios operating in half-duplex or half-duplex type mode using a transmit/receive (push-to-talk, "PTT") switch. As a result, applicants developed a business plan for Radeum to research, develop, manufacture, market and sell wireless headsets and related accessories for two way radios.

Applicants developed a wireless headset that controls the PTT switch of two way radios. The wireless headset developed by Radeum transmits a mode signal for causing a half-duplex communications device (as defined in the specification) to enter a half-duplex transmission mode. Applicants promptly filed the two provisional patents applications to which the present application claims priority disclosing the novel wireless headset for use with two way radios. Applicants subsequently produced prototypes and marketed the FreeMotion 200 wireless

headset. The FreeMotion 200 is the first wireless headset for use with two way radios. The FreeMotion 200 includes a transceiver that transmits a transmit mode signal to a two way radio.

Radeum's success to date is based on developing and marketing wireless headsets that transmit a mode signal for causing a half-duplex communication device to enter a half-duplex transmission mode. Radeum's ability to attract in excess of \$1,000,000 in capital and begin production and distribution of the FreeMotion 200 headset is derived directly from Radeum's presentation to investors, distributors and consumers of wireless headsets for use with two way radios. Sutura Decl., para. 21. Numerous organizations, individuals, and businesses have indicated their desire to purchase the FreeMotion 200 product as soon as it becomes available in the market. Sutura Decl., para. 22. Numerous police departments and law enforcement agencies have signed agreements to test the FreeMotion 200 products and are eager to use and to purchase the FreeMotion 200 product. Sutura Decl., para. 23. Other customers have been contacting Radeum to reserve the FreeMotion 200 for purchase. Sutura Decl., para. 25. Radeum has successfully met and exceeded the goals expected of a nascent enterprise bringing the claimed invention to the marketplace. Radeum has successfully raised capital, developed prototypes, conducted successful demonstrations, and generated intense customer interest in purchasing the product as soon as it produced. All of these successes are directly related to the introduction of the claimed subject matter to the marketplace.

Commercial success is not to be measured by the number of units sold. To the contrary, successful results must be placed in a meaningful context within the market. *In re Huang*, 100 F.3d 135, 40 U.S.P.Q.2d 1685, 1687 (Fed. Cir. 1996). Radeum, in a time period of less than two years, has developed a product, raised significant capital to bring that product to market, initiated production of the product, and begun to market the product. Sutura Decl., para. 22. There is no question that Radeum will sell a significant number of the FreeMotion 200 products as soon as manufactured. Sutura Decl., para. 23.

Radeum's success and the success of Radeum's FreeMotion 200 wireless headset product is directly attributable to, and forms a nexus with, the technology claimed in the present application. There is a clear nexus between the success of Radeum and the claimed wireless headsets for two way radios. The prototype shown and provided to Radeum's investors and the FreeMotion 200 product that is currently being produced and marketed is an embodiment of the claimed invention. Sutura Decl., para. 27. Further, it is the features of Radeum's FreeMotion

200 product that are claimed in the present application that make the FreeMotion 200 product so attractive to interested customers. See Sutera Decl. para. 19 and Exhibits B, C, and D thereto. It is the innovative merits of Radeum's wireless headset that is responsible for its successful beginning over the past two years.

LONG FELT NEED

As demonstrated by the Sutera Decl. and the Miller Decl., the invention satisfies a long felt need in the two way radio marketplace. Mr. Miller is one of ordinary skill in the art of two way radio communications. Miller Decl. paras. 2-5. The need for a wireless headset was recognized by Scott Miller and others in the industry at the time of the invention and development of the wireless headset by applicants. Miller Decl. paras. 7, 8 and 12; Sutera Decl. paras. 28-29. Mr. Miller indicates in his declaration that persons with experience in the two way radio industry were aware in the years before the present application was filed that there was a clear trend and demand for wireless, as opposed to hard-wired, products and accessories. Mr. Miller also indicates in his declaration that he and other were well aware of the significant advantages that wireless devices offered over wired devices. Accordingly, persons in the two way radio communications field were aware that a long felt need existed for a wireless headset product that was compatible with two way radios. Miller Decl. paras. 6-12. Despite the recognition of this need, Radeum is the first to bring a wireless headset for two way radios to the marketplace. Miller Decl. para. 10, Sutera Decl. para. 26. The FreeMotion 200 product is an embodiment of the claimed invention that satisfies the long felt need. Miller Decl. para. 11, Sutera Decl. para. 27.

RESPONSE TO CLAIM REJECTIONS

CLAIM 1

Claim 1 sets forth a transceiver adapted to wirelessly transmit a signal representative of an engagement of a switch to a half-duplex communications device. Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn. Neither Lenz nor Hahn show or suggest such a transceiver. The Examiner cites to Lenz to show a transceiver, but acknowledges that Lenz does not operate wirelessly. Office Action, pp. 2-3. The Examiner relies on Hahn to show wireless operation. The Examiner asserts, "it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a wireless headset

instead of using a wired headset because the wired headset is entangled to [sic] users.” Office Action, p. 3. The motivation to combine the teachings provided by the Examiner is hindsight reasoning created to piece together the elements of the claimed invention. Such hindsight reasoning is improper. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). The motivation provided by the Examiner is not, however, suggested by the art of record. First, Hahn does not suggest the wireless transmission of any control or mode signals. There is no suggestion that the signals transmitted by the Lenz headset are compatible for transmission by the wireless system of Hahn. Furthermore, applicants have demonstrated the commercial success of Radeum and the long felt need in the market for a wireless headset for half duplex type two way radios. This commercial success and long felt need demonstrate that it was not obvious to combine the teaching of Lenz and Hahn as asserted by the Examiner. The commercial success is directly related to the products developed and marketed by Radeum having a transceiver adapted to wirelessly transmit a signal representative of an engagement of a switch to a half-duplex communications device. The commercial success of Radeum and the long felt need for a wireless headset for two way radios demonstrate that invention of claim 1 is not obvious. Applicants respectfully submit that Lenz in view of Hahn does not render claim 1 obvious for the above reasons. Applicants request the withdrawal of the rejection of claim 1 under 35 U.S.C. § 103(a).

CLAIMS 3-5 AND 7-16

Claims 3-5 and 7-16 depend from claim 1. Claims 3-5 and 7-16 stand rejected as being unpatentable over Lenz in view of Hahn. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Accordingly, claims 3-5 and 7-16 are patentable over Lenz in view of Hahn for the reasons set forth above.

In addition, claim 3 sets forth that the switch is positioned on the microphone assembly. The Examiner asserts, “Lenz further discloses, wherein the switch is positioned on the microphone assembly.” Office Action, p. 3. The Examiner is incorrect. “The switch is mounted on the earphone.” Lenz, col. 2, l. 56. Lenz does not disclose that the switch is positioned on the microphone.

Claim 5 sets forth that at least a portion of audio information from the user is transmitted as packetized digital information. The Examiner asserts, “it is well known in the art that the audio information from the user is transmitted as packetized digital information because the headset is the wireless headset.” Office Action, p. 3. The Examiner provides no support for this assertion. “To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught by the prior art.” M.P.E.P. § 2143 (citing *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974)). The Examiner cites to no teaching in prior art regarding the limitations of claim 5.

Claim 7 sets forth that the speaker assembly includes an earbud speaker. Claim 9 sets forth that the speaker assembly includes an ear insert for insertion into the user’s ear canal. Claim 10 sets forth that the ear insert comprises a conformable material. The Examiner asserts that these limitations are “well known in the art since [they are] just variation[s] in design or style of wireless headsets.” Office Action, p. 4. The Examiner provides no support for the proposition that these design variations are well know in the art. The Examiner cites to no teaching in the prior art showing the limitations of these claims. If the Examiner is asserting that these limitations are mere aesthetic design changes, applicants disagree. The type of speaker and the material from which the speaker are constructed have a clear mechanical function and are thus not mere aesthetic design changes.

Claim 11 depends from claim 9 and sets forth that the switch is positioned substantially coaxially with the ear insert. The Examiner asserts, “Lenz further discloses the switch positioned substantially coaxially with the ear insert.” Office Action, p. 4. The Examiner does not identify an ear insert in the teaching of Lenz. Lenz does not show or suggest an ear insert. To the contrary, Lenz discloses muff-type earphones on which a shoulder activated switch is mounted. Lenz, Fig. 1. As Lenz does not teach an ear insert, Lenz does not show or suggest a switch that is positioned substantially coaxially with an ear insert.

Claim 15 sets forth that the signal representative of an engagement of the switch includes a signal transmitted during at least a portion of a period that the switch is engaged. Lenz discloses at column 2, lines 28-30, “When the wearer wishes to transmit, he must activate a ‘push-to-talk’ switch 24.” The Examiner relies on this sentence to show the limitations of claim 15. Office Action, p. 4. Lenz is silent regarding how the switch controls the two way radio.

Lenz merely discloses the switch is engaged. Lenz does not show or suggest that a signal is transmitted during the period that the switch is engaged.

Claim 16 sets forth that the signal representative of an engagement of the switch includes an absence of a signal during at least a portion of a period that the switch is engaged. The Examiner acknowledges the applied prior art is silent regarding these limitations. Office Action, p. 4. The Examiner asserts, "there must be a gap between the transmit mode and the receive mode." Office Action p. 4. The Examiner provides no support for this assertion. There is no suggestion in the prior art of a gap between a transmit mode and a receive mode. Even if there was such a gap, there is no suggestion that such a gap would be an absence of a signal during a period that the switch is engaged as set forth by claim 16.

For the above reasons, applicants respectfully submit that claims 3-5 and 7-16 are patentable over Lenz in view of Hahn. Applicants request that the rejections of claims 3-5 and 7-16 be withdrawn.

CLAIM 26

Claim 26 sets forth a system including a half-duplex communications device and a wireless headset. Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn. Claim 26 sets forth that the headset is adapted to wirelessly transmit a transmit mode signal for reception by the half-duplex communications device, the transmit mode signal causing the half-duplex communications device to enter a half-duplex transmission mode.

The Examiner acknowledges that Lenz does not disclose a headset wirelessly connected to a communications device. Office Action, p. 5. The Examiner relies on Hahn to show a wireless headset. There is no suggestion that the wireless headset of Hahn could accomplish the functions of the Lenz headset. The Examiner asserts, "connecting the wireless headset to either device would be easily done by one skilled in the art." There is no support for this conclusion. There is no suggestion in the applied art that the wireless headset Hahn, for use with full-duplex devices such as cell phones, is at all compatible with transmitting control or mode signals to half-duplex communications devices. The Examiner further asserts, "it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a wireless headset in the invention because the wired headset might become more entangled to users." Office Action, p. 6.

The motivation to combine the teachings provided by the Examiner is hindsight reasoning created to piece together the elements of the claimed invention. Such hindsight reasoning is improper. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). The motivation provided is not suggested by the art of record. Furthermore, applicants have demonstrated the commercial success of Radeum and the long felt need in the market for a wireless headset for half duplex type two way radios. This commercial success and long felt need demonstrate that it was not obvious to combine the teaching of Lenz and Hahn as asserted by the Examiner. The commercial success is directly related to the products developed and marketed by Radeum having a headset adapted to wirelessly transmit a transmit mode for reception by a half-duplex communications device. Applicants respectfully submit that Lenz in view of Hahn does not render claim 26 obvious for the above reasons. Applicants request the withdrawal of the rejection of claim 26 under 35 U.S.C. § 103(a).

Claims 27-33

Claims 27-33 depend from claim 26. Claims 27-33 stand rejected as being unpatentable over Lenz in view of Hahn. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Accordingly, claims 27-33 are patentable over Lenz in view of Hahn for the reasons set forth above.

In addition, claim 28 sets forth that the transmit mode signal includes a signal transmitted during at least a portion of a period that the switch is engaged. Lenz discloses at column 2, lines 28-30, "When the wearer wishes to transmit, he must activate a 'push-to-talk' switch 24." The Examiner relies on this sentence to show the limitations of claim 15. Office Action, p. 6. Lenz is silent regarding how the switch controls the two way radio. Lenz merely discloses the switch is engaged. Lenz does not show or suggest that a signal transmitted during the period that the switch is engaged.

Claims 29 sets forth that the transmit mode signal includes an absence of a signal during at least a portion of a period that the switch is engaged. The Examiner acknowledges the applied prior art is silent regarding these limitations. Office Action, p. 6. The Examiner asserts, "there must be a gap between the transmit mode and the receive mode." Office Action p. 6. The Examiner provides no support for this assertion. There is no suggestion in the prior art of a gap between a transmit mode and a receive mode. Even if there was such a gap, there is no

suggestion that such a gap would be an absence of a signal during a period that the switch is engaged as set forth by claim 29.

Claim 32 sets forth that audio information from the headset and audio information from the half-duplex communications device is transmitted as packetized digital information. The Examiner asserts, "it is well known in the art that the audio information from the user is transmitted as packetized digital information because the headset is the wireless headset." Office Action, p. 7. The Examiner provides no support for this assertion. "To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught by the prior art." M.P.E.P. § 2143 (citing *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974)). The Examiner cites to no teaching in prior art regarding the limitations of claim 32.

For the above reasons, applicants respectfully submit that claims 27-33 are patentable over Lenz in view of Hahn. Applicants request that the rejections of claims 27-33 be withdrawn.

CLAIM 34

Claim 34 sets forth a system including a half-duplex communications device, a headset, and a transmit switch assembly. Claim 34 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn.

Claim 34 sets forth both a transmit switch assembly wirelessly connected to a half-duplex communications device and a headset wirelessly connected to the half-duplex communications device. These are distinct elements of claim 34. The Examiner asserts that the switch 24 of Lenz to show a transmit switch assembly. Office Action, p. 7. However, Lenz does not show or suggest both a headset connected to a half-duplex communications device and a transmit switch assembly connected to a half-duplex communications device. Lenz discloses a headset assembly 10 connected to a two way radio by cord 22. Lenz, col. 2, ll. 15-24. Lenz does not show or suggest a separate transmit switch assembly connected to the half-duplex communications device. To the contrary, the switch 24 of Lenz is specifically a part of the headset assembly 10. The switch 24 is mounted on the earphone 12 of the headset assembly 10 such that the switch is actuated by the wearer lifting his shoulder. Lenz, col. 2, ll. 44-58. This shoulder actuation is central to the Lenz system. To include a distinct switch assembly connected to the two way radio would destroy the shoulder activated feature of Lenz. Accordingly, Lenz does not suggest

both a headset assembly and a distinct transmit switch assembly both connected to a half-duplex communications device.

Claim 34 sets forth that the transmit switch assembly is adapted to wirelessly transmit a transmit mode signal for reception by the half-duplex communications device, the transmit mode signal causing the half-duplex communications device to enter a half-duplex transmission mode. The Examiner asserts that Lenz discloses a system wherein the *headset* is adapted to transmit a transmit mode signal for reception by the half-duplex communications device. Claim 34, however, sets forth that the *transmit switch assembly* is adapted to wirelessly transmit the transmit mode signal. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. M.P.E.P. § 2143.03. The Examiner fails to identify prior art which teaches or suggests both a headset and a transmit switch assembly where the transmit switch assembly is adapted to transmit a transmit mode signal for reception by a half-duplex communications device. For this reason, the Examiner has not established a *prima facie* case of obviousness against claim 34.

The Examiner acknowledges that Lenz does not disclose a wireless headset. Applicants respectfully submit that Lenz also fails to disclose a wireless transmit switch assembly. The Examiner relies on Hahn to show a wireless headset. The Examiner asserts, “it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the wireless headset in the invention because it is more convenient for users to wear the headset without entangling.” Office Action, p. 8. The motivation to combine the teachings provided by the Examiner is hindsight reasoning created to piece together the elements of the claimed invention. Such hindsight reasoning is improper. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). The motivation provided is not suggested by the art of record. Furthermore, the Examiner provides no motivation to modify Lenz to include a wireless switch assembly as set forth by claim 34.

Applicants respectfully submit that the Examiner has not established a *prima facie* case of obviousness against claim 34 for at least the above reasons. Applicants request that the rejection of claim 34 as unpatentable over Lenz in view of Hahn be withdrawn.

CLAIMS 35-39

Claims 35-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn. Claims 35-39 are similar to claims 27-31 respectively but for depending from claim 34. Claims 35-39 are patentable over Lenz in view of Hahn for the reasons set forth above with respect to claims 34 and 27-31. Applicants respectfully request that the rejections of claims 35-39 be withdrawn for these reasons.

CLAIM 18

Claim 18 is directed to an adapter for a two-way radio that transmits information to and receives information from a wireless headset. This accessory permits a wireless headset to be used with existing half-duplex communications devices. Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hahn in view Lenz. Claim 18 sets forth an apparatus that includes a processor connected to a transceiver for receiving a first transmit mode signal indicating engagement of a switch. The processor is also connected to an interface for providing a second transmit mode signal to a half-duplex communications device. The Examiner acknowledges neither of the applied references, Hahn or Lenz, discloses such a processor. Office Action, p. 11. As the applied art does not suggest a processor as set forth by claim 18, the Examiner has not set forth a *prima facie* case of obviousness against claim 18.

The primary reference to Hahn includes no teaching or suggestion regarding a mode signal. The Examiner relies on Lenz to suggest a transceiver for receiving a transmit mode signal. Office Action, p. 11. Lenz does not disclose any such transceiver. Lenz is directed to a wired headset for use with a two way radio. Lenz col. 2, ll. 19-24. Lenz discloses no details of the two way radio, except to say that the radio is not duplex and, thus, when the wearer wishes to transmit, he must activate a push-to-talk switch. Lenz, col. 2, ll. 24-30. As Lenz is a wired device, no transceiver is required. The Lenz switch may simply close a wired circuit that activates the transmit mode in the two way radio. There is no teaching or suggestion of a transceiver in Lenz as asserted by the Examiner.

The Examiner asserts, "Even though Lenz does not disclose a processor connected to the transceiver, but [sic] it is well known in the art that the processor must be in place to process the information." Office Action, p. 11. This conclusion is not supported by the prior art and is based on the Examiner's unsupported and erroneous assertion that Lenz discloses a transceiver.

Lenz discloses a *wired* push-to-talk switch. There is no suggestion in the prior art that a processor must be in place to process information from a wired switch. The Examiner asserts, “it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the processor in order for the apparatus to function properly.” Office Action, p. 12. The Examiner does not explain why a wired switch requires a processor to operate properly. Lenz does not show or suggest a processor, and the Examiner offers no suggestion or motivation to include a processor in the Lenz device.

The Examiner also fails to identify any suggestion or motivation to modify the Hahn system with the teaching of Lenz. Even if Lenz does suggest a processor, the Examiner provides no suggestion or motivation to modify the Hahn system to include such a processor. Hahn is directed to a system for use with mobile phones. Hahn col. 1, ll. 4-8. Lenz on the other hand is directed to a system for use with two way radios. Lenz col. 2, ll. 19-24. As Hahn is not directed to two way radios that require activation of a push-to-talk button to transmit, there is no reason to include a processor for receiving or providing transmit mode signals. There is no suggestion or motivation to modify Hahn to include such a processor.

Furthermore, applicants have demonstrated the commercial success of Radeum and the long felt need in the market for a wireless headset for half duplex type two way radios. The FreeMotion 200 wireless headset developed by Radeum, which is the basis of its success, includes an adapter to permit use with existing two way radios. Sutera Decl. para. 27. The demonstrated commercial success and long felt need show that it was not obvious to combine the teaching of Hahn and Lenz. The commercial success is directly related to the products developed and marketed by Radeum having an adapter that receives transmit mode signals from a wireless headset and provides transmit mode signals to a half-duplex communications device.

Applicants respectfully submit that Hahn in view of Lenz does not render claim 18 obvious for the above reasons. Applicants request the withdrawal of the rejection of claim 18 under 35 U.S.C. § 103(a).

CLAIMS 19-25

Claims 19-25 depend from claim 18. Claims 19-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hahn in view of Lenz. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*,

837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Accordingly, claims 19-25 are patentable over Hahn in view of Lenz for the reasons set forth above.

In addition, claim 23 sets forth that the first transmit mode signal is received from a wireless transmit switch assembly. Neither Hahn nor Lenz teach a wireless transmit switch assembly. The Examiner asserts that Lenz discloses that a transmit mode signal is received from a transmit switch assembly. The Examiner does not identify a transmit switch assembly in the disclosure of Lenz. Lenz discloses a switch 24 that is a part of headset assembly 10. Lenz, Fig. 1. There is no suggestion in Lenz of a wireless switch assembly.

For the above reasons, applicants respectfully submit that claims 19-25 are patentable over Hahn in view of Lenz. Applicants request that the rejections of claims 19-25 be withdrawn.

CLAIM 6

Claim 6 depends from claim 1. Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn and further in view of Chen. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Lenz and Hahn do not show or suggest every limitation of claim 1. The Examiner does not suggest that Chen corrects for these deficiencies of Lenz and Hahn discussed above (and Chen does not). For at least this reason, the Examiner has not demonstrated a *prima facie* case of obviousness against claim 6. Applicants respectfully request that this rejection of claim 6 be withdrawn.

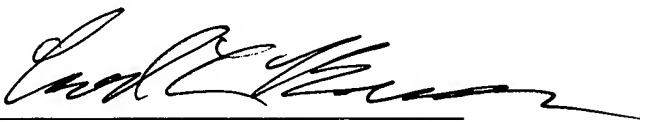
CONCLUSION

The Office Action, references, and rejections have been duly considered by the applicants and addressed by the foregoing remarks. Applicants submit that the prior art does not teach or suggest a wireless headset that transmits a signal that controls a half-duplex push-to-talk mechanism. Reconsideration of the application and withdrawal of the outstanding rejections are respectfully solicited in light of the above remarks. Should the Examiner require resolution of any issues, the Examiner is invited to contact the undersigned to expedite the prosecution of this application.

Respectfully submitted,

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